

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2723	257/315.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2007/03/30 16:13
L2	604	257/317.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2007/03/30 16:15
L3	1541	257/314.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2007/03/30 16:17
L4	1361	438/238.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2007/03/30 16:24
L5	46	memory and (((trench groov\$3) with float\$3) and (control\$3 with eras\$3 with tunnel\$3)).clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2007/03/30 16:31
L6	59	memory and (((trench groov\$3) with float\$3) and (control\$3 with eras\$3 with tunnel\$3)) and tip	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2007/03/30 16:32
S1	1	"20050104116"	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2005/09/04 12:18
S2	228	"5029130"	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2005/09/04 12:18
S3	100	S2 and (trench or opening or groove or slot) and float\$4 and channel and (insulat\$3 or dielectric) and gate	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2005/09/04 12:33
S4	33	S3 and (wall or sidewall or (side adj wall) or side-wall) and substrate and crystal\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2005/09/04 12:31
S5	44	chen-bomy.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2005/09/04 12:32
S6	69	tran-hieu-van.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2005/09/04 12:32
S7	36	lee-dana.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2005/09/04 12:32

## EAST Search History

S8	8	frayer-jack-edward.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2005/09/04 12:32
S9	125	S5 S6 S7 S8	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2005/09/04 12:32
S10	102	S9 not S2	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2005/09/04 12:32
S11	18	S10 and (trench or opening or groove or slot) and float\$4 and channel and (insulat\$3 or dielectric) and gate	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/02/12 22:26
S12	24	"5616510"	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2005/09/04 12:51
S13	4	("5049956"   "5180680"   "5460989"   "5468663").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/04 13:03
S14	23	("5616510").URPN.	USPAT	OR	ON	2005/09/04 13:04
S15	4000	((fowler adj nordheim) near2 tunnel\$3) and memory and (float\$4 and control\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/02/12 22:28
S16	623	S15 and source and drain and trench and vertical\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/02/12 22:29
S17	167	S16 and (NAND)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/02/12 22:29
S18	144	S17 and (@rlad<"20031113" or @ad<"20031113")	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/02/13 13:13
S19	95	S18 and (tunnel\$3 near3 \$2oxide\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/02/12 22:30
S20	95	S19 and substrate and (charge\$3 or carrier or hole or electron\$2)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/02/12 22:31
S22	25	S20 and (crystal\$4 with substrate)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/02/12 22:32

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S23	19	S22 and (tunnel\$3 with float\$4 with control\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/02/13 12:38
S24	18	("20020056870" "20020163031" "20040087084" "5021999" "5029130" "5739567" "5768192" "6002152" "6011725" "6093945" "6103573" "6151248" "6281545" "6329685" "6420231" "6426896" "6541815" "6597036").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/02/13 12:38
S26	11	S24 and ((tunnel\$3 or travel\$3) with control\$3 with (trap\$4 or float\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/02/13 12:45
S27	9	S26 and (eras\$4 with (float\$3 or trap\$4 or keep\$3) with control)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/02/13 13:12
S28	581	trench and ((eras\$4 or discharg\$3 or remov\$3) with (float\$3 or trap\$4) with control with tunnel\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/02/13 13:22
S29	531	S28 and (@rlad<"20031113" or @ad<"20031113")	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/02/13 13:14
S30	320	S29 and (substrate and channel and vertical\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/02/13 13:14
S31	232	S30 and (trench with gate)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/02/13 13:16
S33	147	S31 and memory and column and row	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/02/13 13:17
S34	145	(S33 not (S24 S26 S27)) and (source and drain)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/02/13 13:19
S35	145	S34 and \$2oxide\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/02/13 13:19
S36	87	S35 and ((common or shar\$3) with (source or drain))	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/02/13 13:23
S37	1	S36 and ((eras\$4 or discharg\$3 or remov\$3) with (float\$3 or trap\$4) with control with tunnel\$3).ab.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/02/13 13:22

## EAST Search History

S38	33	("4757360"   "4794565"   "4882707"   "4905062"   "4931847"   "4947221"   "5021848"   "5029130"   "5041886"   "5049959"   "5101250"   "5268319"   "5386132"   "5429965"   "5544103"   "5572054"   "5780341"   "5780892"   "5786612"   "5789293"   "5796139"   "5808328"   "5811853"   "5814853"   "6091104"   "6103573"   "6130453"   "6140182"   "6159796"   "6222227"   "6262917"   "6368917"   "6525371").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/02/14 13:01
S39	41	("20030073275"   "4757360"   "4794565"   "4882707"   "4905062"   "4931847"   "4947221"   "5021848"   "5029130"   "5041886"   "5049515"   "5101250"   "5268319"   "5338953"   "5381028"   "5429965"   "5495441"   "5544103"   "5572054"   "5638320"   "5780341"   "5780892"   "5789293"   "5796139"   "5808328"   "5811853"   "5814853"   "5943572"   "6091104"   "6103573"   "6140182"   "6157058"   "6180458"   "6222227"   "6262917"   "6316298"   "6316315"   "6521944"   "6538275"   "6541815"   "6756633").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/02/14 13:04
S40	0	("6952034").URPN.	USPAT	OR	ON	2006/02/14 13:20
S41	1	10/714243	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/02/14 13:40
S42	33	("4336603"   "4380057"   "4417264"   "4855955"   "5021999"   "5043940"   "5070032"   "5095344"   "5095461"   "5159570"   "5172338"   "5210047"   "5278439"   "5297148"   "5313421"   "5315541"   "5343063"   "5364806"   "5411905"   "5412600"   "5414693"   "5486714"   "5576567"   "5606521"   "5616510"   "5636160"   "5643814"   "5661053"   "5712180"   "5714412"   "5786612"   "5812449"   "5991201"   "B15172338").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/02/14 14:21
S43	9345	257/302,315,316,317,328,e21.375,e21.41,e21.447,e21.629,e21.643,e21.676,e21.692,e21.693,e27.054,e27.096,e29.183,e29.189,e29.262,e29.274,e29.313,e29.318.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/07/06 18:51
S44	3032	438/257,259.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/07/06 18:52
S45	15	H01L21/8247.ipc.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/07/06 18:52
S46	250	H01L29/788.ipc.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/07/06 18:52
S47	11755	S43 S44 S45 S46	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/07/06 18:53
S48	1189	S47 and ((float\$4 or (charge near2 (hold\$3 or trap\$4 or keep\$4))) with (trench or groove or slot)) and control\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/07/06 18:59
S49	599	S48 and ((float\$4 or (charge near2 (hold\$3 or trap\$4 or keep\$4))) with control\$4 with tunnel\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/07/06 18:59

## EAST Search History

S50	511	S49 and (@ad<"20031113" or @rlad<"20031113")	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/07/06 18:59
S51	318	S50 and ((source or drain) with (trench or groove or slot))	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/07/06 19:00
S52	14	(US-20050104116-\$ or US-20040253787-\$).did. or (US-6444525-\$ or US-5786612-\$ or US-5616510-\$ or US-6151248-\$ or US-5180680-\$ or US-6597036-\$ or US-6958273-\$ or US-6316315-\$ or US-5049515-\$ or US-6756633-\$ or US-6952034-\$ or US-6541815-\$).did.	US-PGPUB; USPAT	OR	ON	2006/07/06 19:00
S53	41	("20030073275"   "4757360"   "4794565"   "4882707"   "4905062"   "4931847"   "4947221"   "5021848"   "5029130"   "5041886"   "5049515"   "5101250"   "5268319"   "5338953"   "5381028"   "5429965"   "5495441"   "5544103"   "5572054"   "5638320"   "5780341"   "5780892"   "5789293"   "5796139"   "5808328"   "5811853"   "5814853"   "5943572"   "6091104"   "6103573"   "6140182"   "6157058"   "6180458"   "6222227"   "6262917"   "6316298"   "6316315"   "6521944"   "6538275"   "6541815"   "6756633").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/06 19:15
S54	2	((("6891220") or ("6952034"))).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	OFF	2006/07/26 16:32
S55	42	("20030073275"   "4757360"   "4794565"   "4882707"   "4905062"   "4931847"   "4947221"   "5021848"   "5029130"   "5041886"   "5049515"   "5101250"   "5268319"   "5338953"   "5381028"   "5429965"   "5495441"   "5544103"   "5572054"   "5638320"   "5780341"   "5780892"   "5789293"   "5796139"   "5808328"   "5811853"   "5814853"   "5943572"   "6091104"   "6103573"   "6140182"   "6157058"   "6180458"   "6222227"   "6262917"   "6316298"   "6316315"   "6521944"   "6525371"   "6538275"   "6541815"   "6756633").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/26 16:34
S56	41	("20030073275"   "4757360"   "4794565"   "4882707"   "4905062"   "4931847"   "4947221"   "5021848"   "5029130"   "5041886"   "5049515"   "5101250"   "5268319"   "5338953"   "5381028"   "5429965"   "5495441"   "5544103"   "5572054"   "5638320"   "5780341"   "5780892"   "5789293"   "5796139"   "5808328"   "5811853"   "5814853"   "5943572"   "6091104"   "6103573"   "6140182"   "6157058"   "6180458"   "6222227"   "6262917"   "6316298"   "6316315"   "6521944"   "6538275"   "6541815"   "6756633").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/26 16:37
S60	42	S55 S56	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/26 16:40
S61	20	S60 and trench	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/26 16:48
S62	19	S61 and control\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/26 16:49

## EAST Search History

S63	19	S62 and float\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/26 16:50
S64	11	"6756633"	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/07/26 18:32
S65	26	("4757360"   "4794565"   "4882707"   "4905062"   "4931847"   "4947221"   "5021848"   "5029130"   "5041886"   "5101250"   "5268319"   "5429965"   "5544103"   "5572054"   "5780341"   "5780892"   "5789293"   "5796139"   "5808328"   "5811853"   "5814853"   "6091104"   "6103573"   "6140182"   "6222227"   "6262917").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/26 18:36
S66	41	("20030073275"   "4757360"   "4794565"   "4882707"   "4905062"   "4931847"   "4947221"   "5021848"   "5029130"   "5041886"   "5049515"   "5101250"   "5268319"   "5338953"   "5381028"   "5429965"   "5495441"   "5544103"   "5572054"   "5638320"   "5780341"   "5780892"   "5789293"   "5796139"   "5808328"   "5811853"   "5814853"   "5943572"   "6091104"   "6103573"   "6140182"   "6157058"   "6180458"   "6222227"   "6262917"   "6316298"   "6316315"   "6521944"   "6538275"   "6541815"   "6756633").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/12/19 17:19
S67	6	("4796228"   "4868619"   "4929988"   "4972371"   "5045490"   "5180680").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/12/19 17:24
S68	46	("5338953").URPN.	USPAT	OR	ON	2006/12/19 17:26